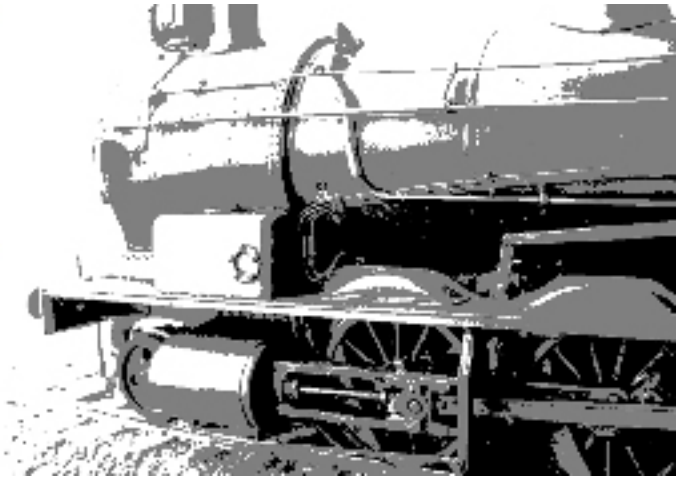
7th Heaven



Aus7 Modellers Group Inc.

$7.70 inc GST

In this Issue :

No 15
Spring 2007

Aus7 News

Mutual Assistance

This item was posted recently on the 7mmAusmodelling chat group by our past Vice President Chris Harris.

"John O'Neill and I each have an O-Aust/Century Models 50 class loco kit as yet unbuilt. We thought we might try to set aside time once a month or so next year to build them together. We would do this at John's place at Oatley and possibly at my place at Kyle Bay. Each of us feels we will get into less trouble if there is another person(s) to collaborate with during the construction process. It occurred to us that there may be others who might be interested in joining us. This would not be an exercise where either of us were intending to, or able to, lead or instruct the group; just an opportunity for a few people to get together every few weeks to do some modelling. The group could perhaps circulate between "members" homes but would probably have to remain reasonably small to prevent organization becoming difficult.

Is there anyone out there who might be interested in this?"

If you're interested Chris can be contacted via the editor or through his email address c.harris@nigelbowen.com.au.

Aus 7 news continued page 17.

Aus7 Modellers Group Membership

Membership of the Aus7 Modellers Group costs just $AU30 per year.

All memberships are due for renewal by June 30th each year, no mater what time of year you joined.

For details contact:
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4 Bridge Quarry Place,
Glenbrook, NSW, 2773

One Modellers Opinion

Trevor Hodges

Competitions

After initially thinking that I wouldn't make it to the Oct BDO I found myself standing in the generous proportions of North Sydney Leagues Club's auditorium looking at the entries for the Waratah Model Railway Co's diorama competition and catching up with friends. The bigger space certainly made for a more relaxed atmosphere and provided us with the room to display the "tidal wave" of entries in the diorama competition.

As I stood and surveyed the number of entries I must admit to being a little disappointed with the response; if even half of the number of people who had indicated they were going to place an entry had fronted up with something we would have doubled the number of actual entries. Nevertheless, the standard of the entries was excellent and the winners deserved their prizes. My good friend Stephen Reynolds, the winner of the competition, told me he had been up till 2.00am the night before the competition. His winning entry was a credit to him. The second place getter, Matthew Ratcliff, produced a diorama that was beautifully presented. This young man also won a first place in the recent AMRA modelling competition at the Hurstville exhibition. He is obviously a modeller to watch. The proprietors of the Waratah Model Railway Co, Dave Morris and Chris Harris, are to be thanked and congratulated for their foresight in offering the prizes for the diorama competition. I hope their support of our scale is rewarded with a few kit sales. They are both great advocates of our scale and staunch supporters of the Aus7 Modellers Group.

The executive of the group had put a lot of work into organizing this latest BDO and we'd also invested a lot of the group's resources in a hunch that a diorama competition and really good presentations would draw out more attendees. The bigger venue was quite a bit more expensive than the space we normally hire and we'd advertised the event quite heavily in AMRM. As it turned out attendance was up by about 1/3 and this allowed us to make a modest profit on the day, which is very encouraging.

After contacting members individually in the mail-out of the last issue of 7th Heaven renewals have improved modestly. It turns out that a couple of issues which had been staring us in the face account for some members not being aware that their memberships had lapsed. Kim and I will be working on addressing these in this and upcoming issues of the magazine. It perhaps would pay to point out that memberships of the Aus7 Modellers Group work in a similar fashion to horses' birthdays, in that they all fall due on the same day. A year's membership is $30. After what we feel was a successful test of a new commercial printer for the last issue of 7th Heaven, and with the recent BDO turning a modest profit, the group's finances are in very good shape going into the New Year.

May I take this opportunity of wishing all members and their families the very best of Christmas and New Year's greetings? Spend some time over summer with your families and do a little modelling; there is no better way to relax.

7th HEAVEN

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On the cover:
A Holden ute sits beside the line in a classic Aussie scene on Roger Porters 7mm Scale module

BDO Report October 2007

Martin Hartley

Well, another BDO (Big Day Out) has come and gone. As usual, we had high-quality presentations on interesting subjects. Many new ideas about model building were presented and I feel that Australian O scale could be at the forefront of introducing new technologies, designs and methods in the Australian model railway scene.

General attendance was considerably up from previous BDO's and the general consensus was that the larger room at the venue was more comfortable and provided more room to have displays.

There were seven entries in the Waratah Models Diorama competition. The dioramas were of excellent quality. They also showed how different areas of modelling could be focused on. The grain shed had a lot of atmosphere to it. Warren Clowry brought an interesting entry, thinking outside the square and well, putting it all in a box (don't ask, you had to be there to see it). One entrant, Matt Ratcliff, had only been sold his first O scale kit back in March, won a prize for an O scale model kit at Hurstville and built a diorama which achieved 2nd place in the diorama competition. Stephen Reynolds took out first prize.

The broad topics for the day were: Building better models, New technology in model manufacturing, NSWR signals, and Better model Painting

Bernard Snoodyk's presentations on Building Better Models and painting models were fantastic. Kieran's presentation on new technology and it's applications in model manufacture was a real eye-opener. The talk on signalling (focussed on branch lines) was a fascinating look into the workings of the NSWR.

The material presented was what I can only describe as dynamite. My mind was blown open by the possibilities of our hobby. At the end of the day, one could not help but have a strong desire to pull out that kit from the drawer and get working on it.

There was a healthy field of commercial support at this BDO. It's hard to walk past The Waratah Model Railway Co., PME Models, Bergs (supplying O-Aust) and Mountain Blue with their range of kits, parts, figurines and other small detailing items.

For those who haven't been to a BDO, it's an excellent event and for the entry fee you get good quality presentations. My opinion is that attending these two BDO's each year (March & October) and membership to the Aus7 Modeller's Group Inc. is *the* best money that I ever invested into my hobby.

Above : Stephen Reynolds (right) accepts first prize for his diorama.
Bottom: Matthew Ratcliff (right) is congratulated by Chris Harris (left)

Building American Suburbans - Part 2

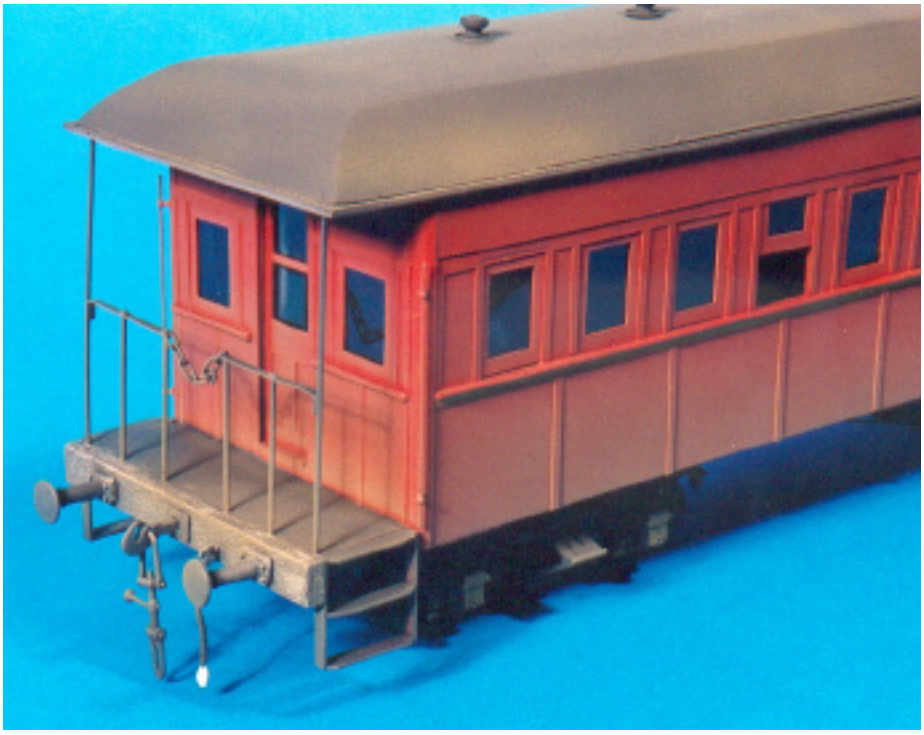
Trevor Hodges

Some Initial Considerations

In the first part of this series, which appeared in issue #12 of 7th Heaven, I described the background research I did to undertake this project and the construction of the bogies for the carriages. In this second part I will describe the construction of the carriage bodies and roofs.

In that first part of the series I mentioned a Wild Swan book by David Jenkinson entitled "Carriage Modelling Made Easy". Since then I have been told that this book is out of print and is therefore difficult to obtain. However Kim Mihaly, the editor of this very tome, told me recently, as he complained that I needed to get off my duff and write the second part of this series, that he had tracked down a copy of this book from a UK source. Having a copy to hand is not crucial to completing a carriage building project following these articles. I do not follow Jenkinson's methods slavishly, especially in the area of the roof. Having said that "Carriage Modelling Made Easy" is still highly recommended and if you can find a copy I would snap it up quick smart.

Another issue that has been raised with me since I wrote that first part of this series concerns the suitability of styrene for this type of construction. One modeller I spoke to had some concerns that styrene may not be strong or stable enough to construct such long vehicles. Styrene is more than strong enough to be used in all areas of construction in a project such as this, including the under-frame. Even if a modeller has some doubts about the advisability of the use of this material they could easily reinforce the area through the use of brass or steel centre sills and bracing. However even styrene has its limitations and warping can be a concern. The longer the section being used in an unbraced "wall", the more likely warping will occur. This is particularly so if the section is to have large holes cut in it. So the solution to this is brace wherever you can.



Marking Out and Cutting

It often seems to me that the time spent planning and marking out a scratchbuilding project such as the construction of these carriages is only marginally exceeded by the actual building. From the plans I had on hand I marked out the main sections, sides, ends and floor on pieces of 1.5mm thick (approximately .040) white sheet styrene. As I've mentioned in other places I purchase my styrene in large sheets from plastics wholesalers for a fraction of the cost of the material that comes packaged from companies such as Evergreen. By using large sheets I can mark out and cut a whole side from one, single piece of styrene rather than butting smaller pieces together. I've seen larger 24" sheets of styrene from Evergreen in hobby shops so you may be able to pick up what you need if you can't find a wholesaler in your area. Look in the Yellow pages is my advice, you'll save yourself heaps. As you can see from the photograph (photo 1) the process of marking out is carried out with nothing more high tech than some steel rules, an HB pencil and a rubber.

This is very much a case of measure twice, cut once. No matter how careful you are you're probably going to make some mistakes. You need to be especially careful to ensure all your sides are the same length and that the lines are parallel. Photo 1 shows the best way to achieve this; you mark out the two sides as mirror images of each other and in this way you should ensure they are the same size. In spite of this it is a relatively easy task to draw the longer lines ever so slightly off parallel. There is no secret to marking out the parts you need and I can't really describe the best way to go about it beyond saying that you look at the plans, convert these into scale 7mm dimensions and then draw them on the styrene. Get yourself some paper, a calculator and begin work, it's the only way to get the job done.

When you are satisfied that you have marked out your parts correctly it's time to start cutting out. I try to ensure I minimise the number of mistakes by marking a pencil cross on all those waste sections that are to be removed.

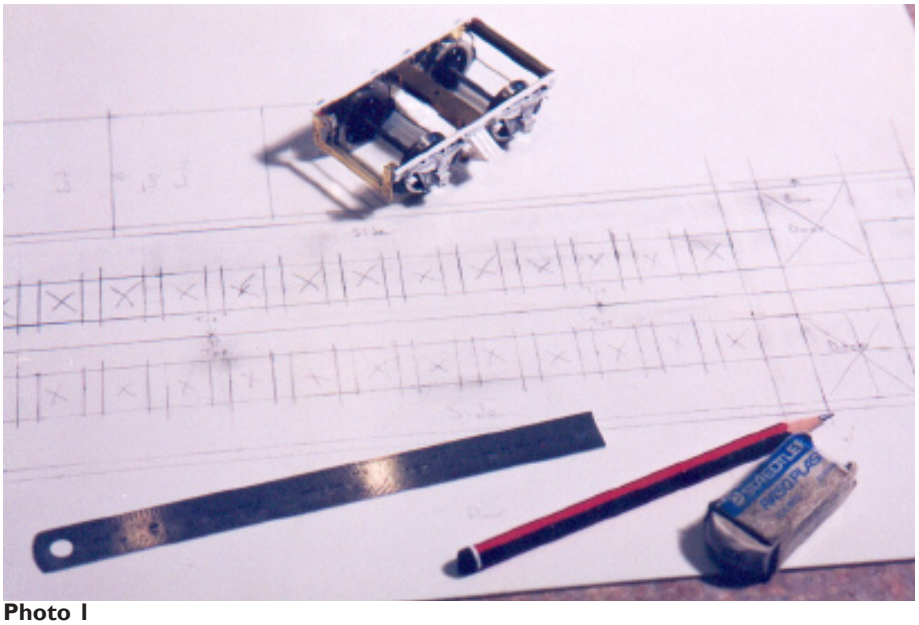


Photo 1

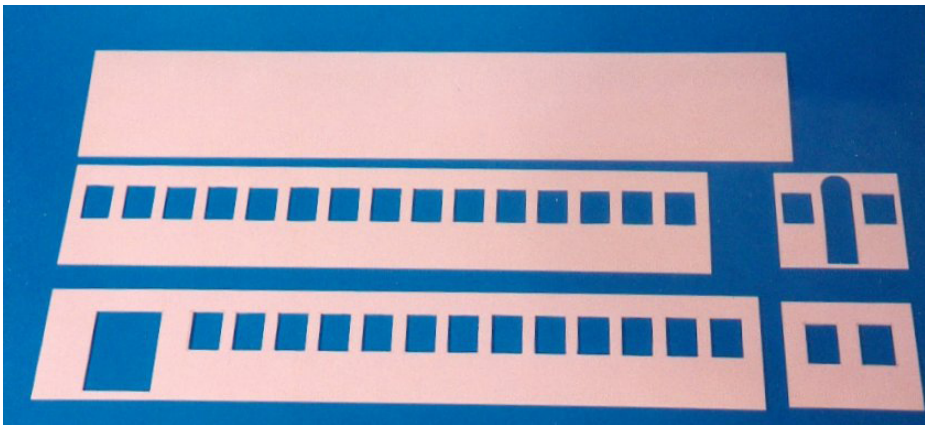


Photo 2

Photo 3

You will need a range of different steel rules for cutting out. I have them in just about every size from 15cm up to 1 metre in length. It's also advisable to have a range of different sized set squares. I use a sharp, new blade in a Stanley knife to cut out the main sections from the 1.5mm styrene. I make two marks or indentations with the tip of the blade on the pencil line near each end of the drawn line. I get the steel rule in my left hand, put the tip of the blade lightly in the indentation I've just made and then slide the rule up to the edge of the blade. I then place the blade in the other indentation and slide the rule up to this. After a little adjustment I should have the rule running in parallel with the pencil line and be ready to make a cut. I start by making a light, scoring cut on the surface of the styrene, trying to ensure I don't push too hard against the rule because it might slip. I also ensure I've got my fingers out of the way. I then make one or two deeper cuts into this line and then lift the rule and blade away. After you've got these cuts made you should be able to lightly snap the styrene along this line. There is no need to cut right through the styrene, in fact I would specifically recommend against this. The more cuts you make, the more likely you are to slip, thus causing an accident or scoring the surface of the styrene. Some modellers I know glue 600 grit wet and dry paper to the underside of their steel rules to avoid them slipping but I've never bothered to do this because I'm too lazy.

Cutting out the windows accurately in a project like this is without a doubt the most intimidating aspect of the whole process (photo 2). You should be aiming to have all the openings neatly cut, with their edges clean and lining up as accurately as possible. The bottom and top edges of these openings are crucial; if they don't line up this will be apparent every time you sight down the side of the carriage. With the way these carriages were built this is less of a problem because the main 1.5mm sections only provide the inner carcass of the carriage with much thinner .010 sheet styrene providing an overlay for the outer shell. This allows you to make sure your lines are straighter and neater than working with this thicker material sometimes allows. Again there is no magic formula with cutting out the windows and doors; you begin at the beginning and work steadily until the job is complete. I cut the main sections out first and then worked on the window and door openings on each section. To cut the windows out I score around the four edges of each opening, then score a cross in the

centre of the waste and repeatedly cut these crosses until I begin to see a line on the underside of the styrene. You have to keep turning the piece over to see this. When I'm almost through on a couple of these cuts I give the waste a hard tap with the end of my Stanley knife. After this initial break through it's an easy job to lever the remaining pieces of waste away.

Once the main sections have been cut out, and the window and door openings have been opened up, it's time for a little assembly. Take one end and a side and glue these together, repeating this for the remaining parts. You can then attach these together and glue them to the piece you've cut out for the floor. Only ever use proper, thin styrene liquid for this job such as MEK and never the thick goop that comes in tubes from companies like Airfix and Tamiya; the sort of glue that we all struggled with as children while putting airplane kits together.

Detailing the Exterior

Once you have this basic carcass you need to trim out the exterior to give the surface some detail. It's a good idea to get yourself a copy of the Evergreen styrene catalogue to aid in this. I refer to my copy constantly and have a good proportion of their range. You can pick these catalogues up at most hobby shops. For the two carriages I was building I decided I wanted one to have matchbook siding (the FO) and the other to be sheathed in masonite (the CCA) which means it has plain sides with the gaps between the masonite panels covered by thin strips of trim wood. I studied photos and plans and worked on the surface detail until I had them to a level I was happy with using a wide range of different strip and shaped styrene the vast majority of it .010. There is no way I can adequately describe this process, it's the same as the cutting out; start at the beginning and keep working until you finish.

In some spots, such as the bottom edge of the CCA there was a need for the styrene being applied to have rivet detail (photo 3). Whereas all the other trim being applied was plain strip applied directly from the packet, these pieces were cut from wider .010 sheet stock. I achieve the rivet detail by the use of a NWSL riveter and indexing table. This tool allows the modeller to apply rivet detail of a consistent quality and, most importantly in this process, that line up. I get a piece of .010 styrene about 8cmX8cm and stick this to the indexing table of the tool using masking tape. I then experiment with different sizes and spacings of rivets until I'm happy with their look in that they match what I can see in the prototype photos of the carriages I have on hand. I then run enough stock to complete the job, cut the resultant rivets from the stock in strips and apply these to the carcass.

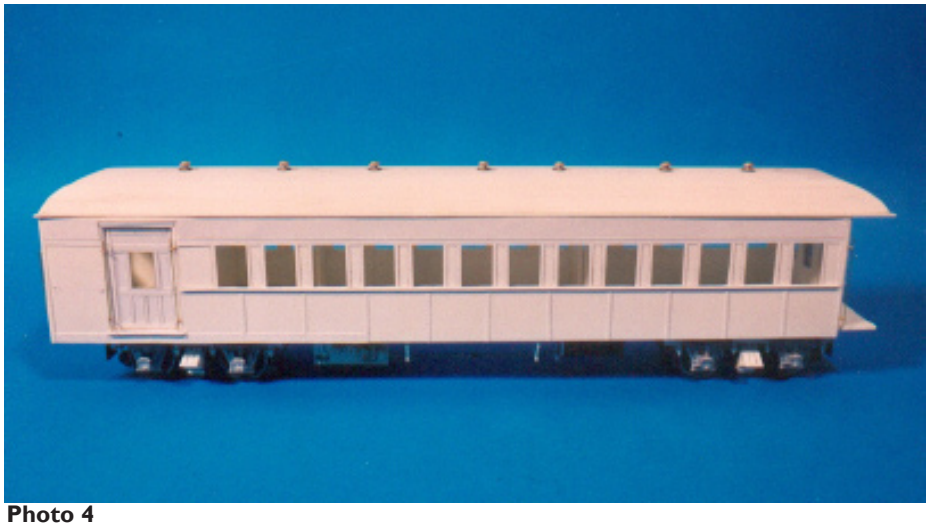


Photo 4

All the windows in these carriages, along with vast majority of the plain trim you can see in the photos, are trimmed with .010X.060" Evergreen strip (catalogue item no 103). Each piece of trim is applied so it is sits just proud of the edge of the window hole already cut in the carcass (photo 4). This results in a pocket into which you can place the window frame and eventually the clear "glass" you will use to produce the windows. This trimming is a fairly slow and tedious process but it does allow you to cover up any messy cutting and filing you produced in removing material from the main carcass. While this work is being carried out you can also work on making up the doors that are a feature of the CCA. This was formed from a piece of flat .030 stock, a hole for the window cut out and trimmed out in a range of strip stock (photo 5). The hand rails were made up from

Photo 5

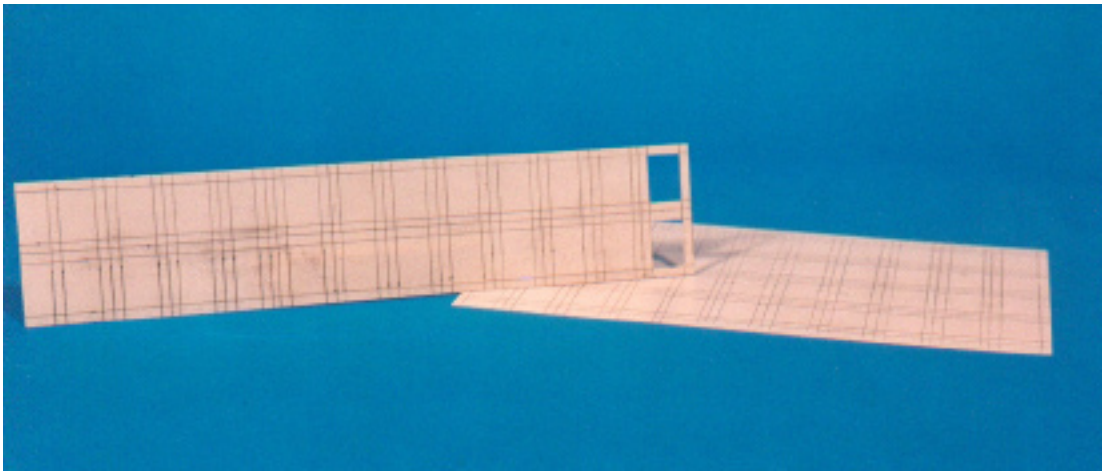


Photo 6

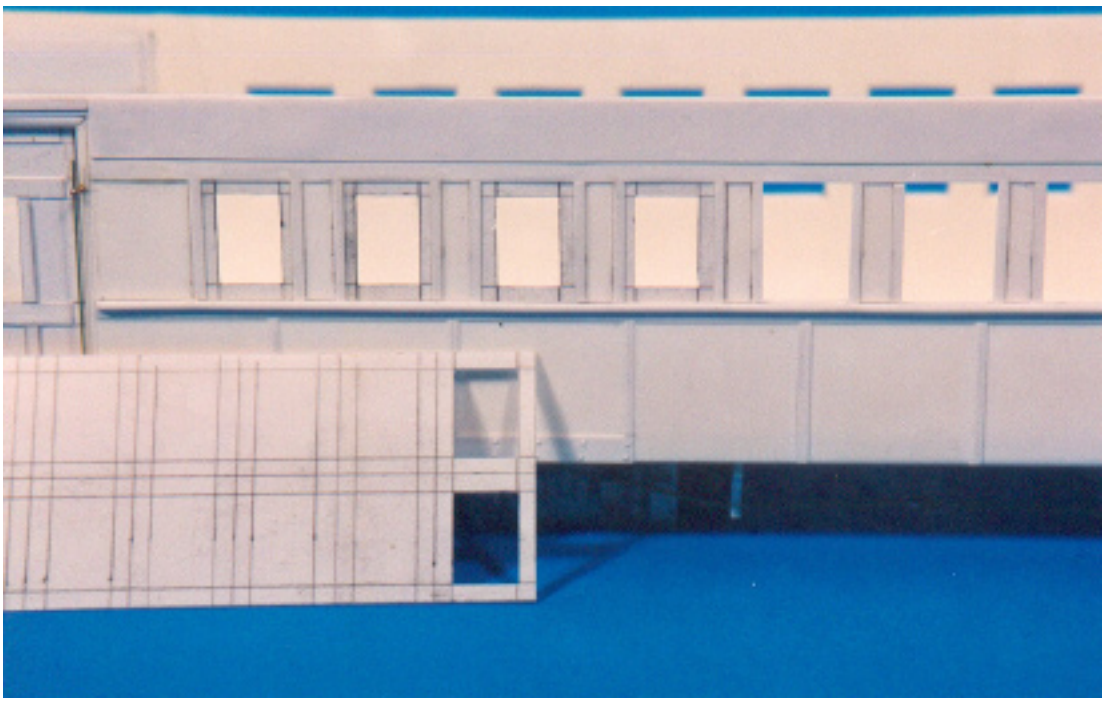


Photo 7

some turned brass stanchions I had left over from my HO modelling and some .5mm brass wire. These were probably a little under scale but I convinced myself at the time that they looked ok and best of all I had them on hand and didn't have to go out and buy new "scale" ones.

After the window trim was applied I needed to produce a lot of window frames, again from .010 stock. I produced these frames by drawing them up on sheet stock and then cutting these out in pairs (photo 6). You remove the centre square of waste and then cut them off as needed. These frames are placed in position from the rear (ie from inside the carriage) and should be just a little smaller than the hole in the carcass but slightly bigger than the trim covering their edges. The only way of achieving this fit is to cut each one separately and then trim and fettle them until they fit snugly up against the back of your exterior trim. In the photo (photo 7) you can see that I've applied four frames to the windows on the left with the rest yet to be done. You soon come to realize that there are a lot of windows in railway carriages! Glazing comes after painting, so don't even think about starting on this job at this stage.

Underbody and Fitting the Bogies

The underbody detail of these carriages was a real challenge because when I built them I hadn't got a single clear photo of what went where. I used a range of photos which showed the side of the carriages (see references) in an attempt to determine location. I applied the same details to both carriages (photo 8) without knowing whether this was what was actually on the prototype. I purchased a range of different, but likely looking,

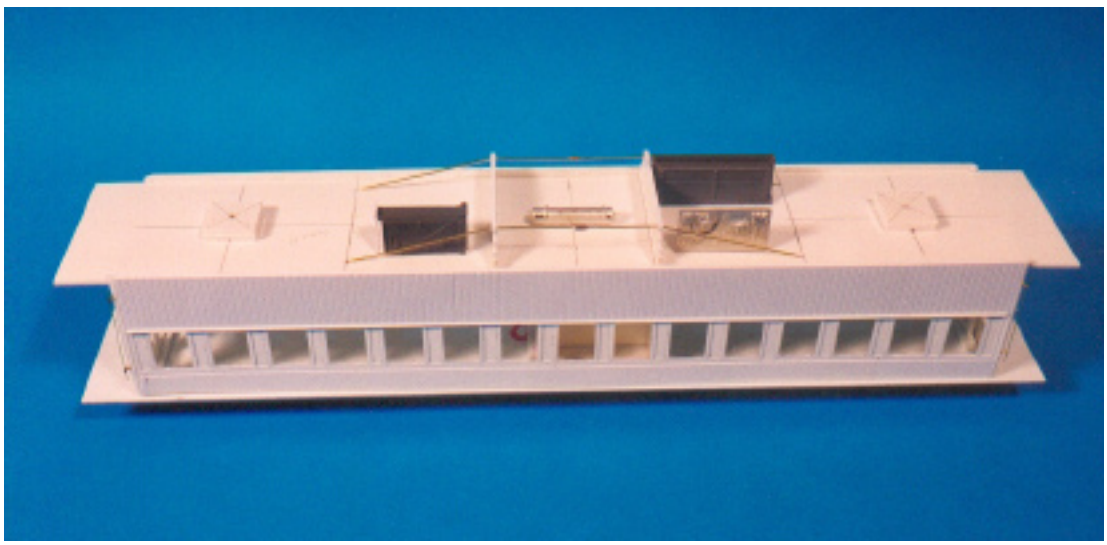


Photo 8

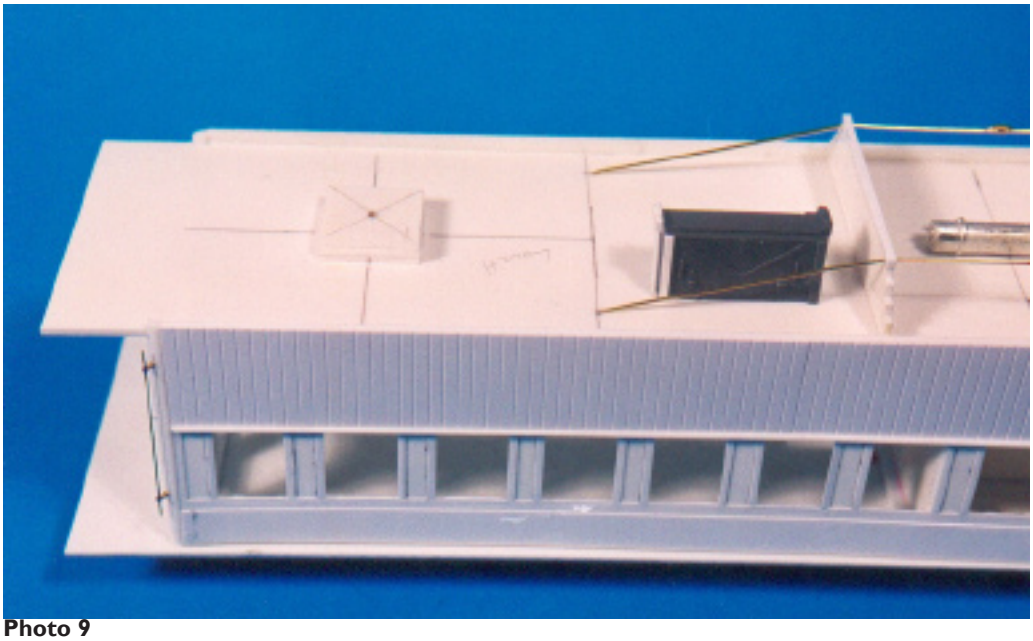


Photo 9

detail parts from Kerroby and from Bruce Lovett who sells some 7mm scale items at BDO's on the Bergs stand. I purchased the bogies that sit under the FO from Bruce as well. These parts were labeled as battery boxes and electrical boards and the like. I have no idea what they did on the prototype; I assume that they carried batteries and distributed electricity. Should I care? All I was interested in was the fact that they looked the part and approximated what I could see in the photos and plans. The truss rods were formed from .8mm brass wire and I placed a turnbuckle onto these before gluing in place. I have no recollection where I got these from but they're sold by numerous companies so just look around and buy some from your favourite supplier.

After puzzling and pondering about how the truss rods were held in place on the prototype I finally saw a photo in AMRM of an upturned American suburban carriage which showed that they had two boards that ran laterally across the carriage with a curious stepped arrangement where the rod from the truss rods was carried. I formed these up from 1.5mm styrene and guessed at the dimensions of the "steps" (photo 9). The bogie bolsters are formed from more layers of 1.5mm styrene and, once glued in place, these are drilled and tapped to accept a 10BA bolt. Any suitable small brass or nickel bolt will do if you don't have access to the BA range. Again these can be had from most good hobby shops. I think the BA stands for "British Association" but I may be wrong.

The buffer beams were made up from pieces of .125X.250 strip styrene (Evergreen catalogue no 189) as separate units (photo 10). They were cut to length, scribed with the edge of a razor saw to give them wood grain texture and then holes were drilled for the various hardware. The hardware I used for my carriages was supplied by the English company CPL however the local manufacturers such as Waratah and PME now supply a range of items that beautifully capture the look of NSWR hardware so I would look locally before going to the expense of importing these items from overseas.

Roofs and Interiors

For some reason the mention of carriage roofs seems to give most average, stout hearted modellers, a case of the collywobbles. I'm not sure why this should be so but it is the element of scratchbuilding carriages that is most often cited to me in conversation as being the biggest stumbling block to getting started. What if I told you that I formed the roof blanks for these carriages in less than half and hour? That's a total of half an hour for both roofs, so each one took approximately fifteen minutes. In Jenkinson's book he details how he gets his roofs milled up at a local woodworkers mill shop out of some exotic wood. He's probably hastening the extinction of some rare tropical hardwood in doing this but this particular phase of construction did give me pause for thought at the time. I pondered and thought for a while, well to be truthful for about 15 minutes, and decided in my usual cavalier fashion that I could do at least as good a job on my own with nothing more high tech than some 12mm mdf, an electric plane and a range of different sand papers.

The process went like this: I decided on the profile roof I wanted and got the approximate sizes for things from the plans cited in part 1 of this series. I got some 12mm mdf, this seemed to be adequate for the cross section I was after, and cut these to the size I required on my Triton workbench (any table saw will do). I drew some lines on these to give me a guide for the curves I wanted and then attacked

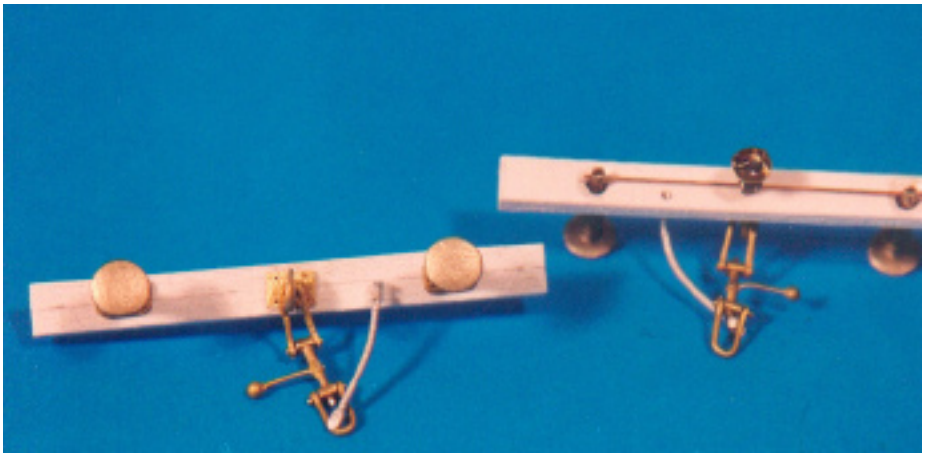


Photo 10

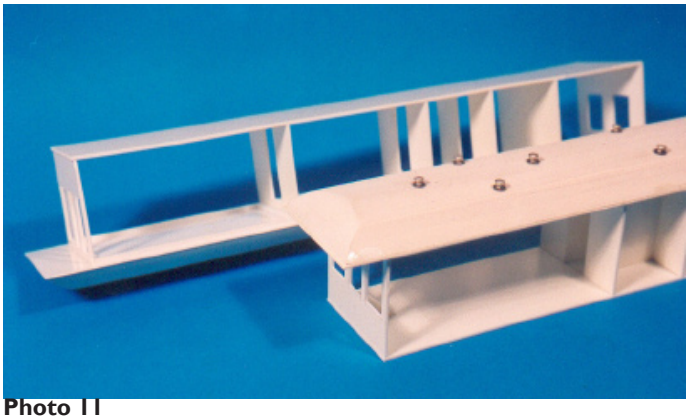


Photo 11

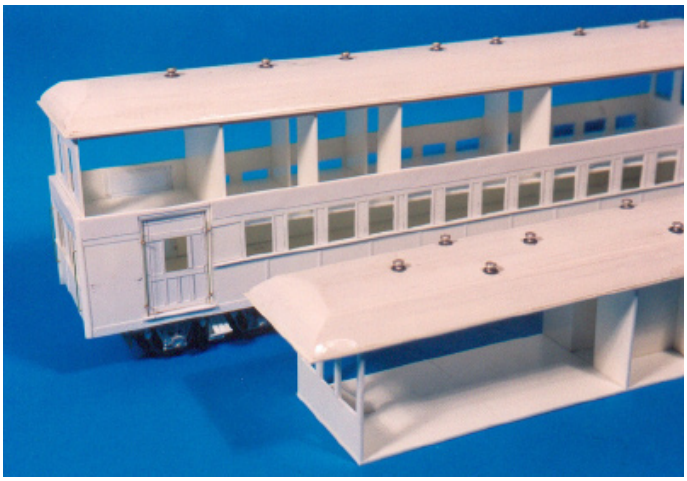


Photo 12

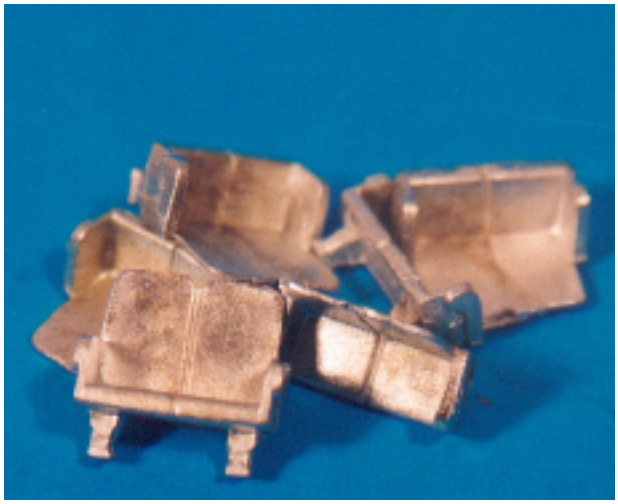


Photo 13

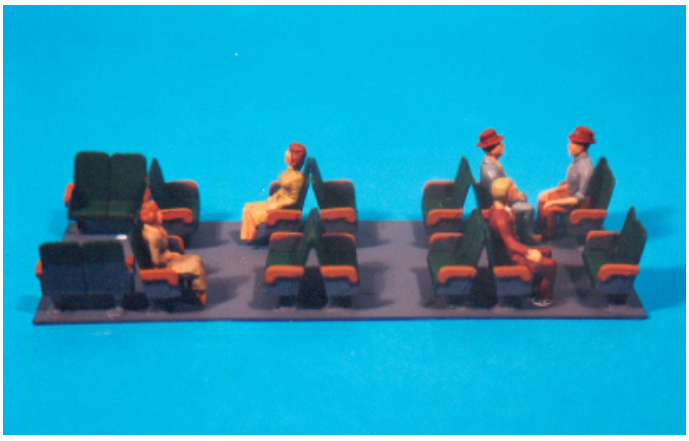


Photo 14

them with an electric hand planer. I had the blade set fairly shallow so that I didn't remove too much material at one pass but it took all of 10 minutes to get two blanks to the approximate shape I wanted. I finished off with two grades of sand paper and this smoothed off the rough edges. You can see the shape I achieved in the photos. It was a doddle and didn't require me to add to global warming, well that is unless the production of mdf causes global warming. Ooops!

The interiors of the carriages, their roofs, and the way they interact with the bodies, is the area where I most radically deviated from the method outlined by Jenkinson. I wanted to be able to get at the interiors of the carriages and, as I'd used the floors to provide permanent structural rigidity, I had to come up with another way of fitting the roofs, one that would allow me to pop them off when I needed to. The method I came up with saw me build a separate interior shell which was glued to the underside of the roof of each carriage (photo 11). I glued these to the roofs with contact cement after first cutting out holes to ensure they didn't block the windows and doors etc. Integral to these shells was all the interior partitions and details such as seats and figures. These shells slide between the exterior walls and are only made up of partitions and a floor, there are no sides (photo 12). When slid into place they are secured with four small bolts which come up from under the exterior floor. The roof vents are from Ian Lindsay Models.

Detailing the interior was carried out on separate rectangles of styrene. This allowed me to paint and install the details away from the carriages and then place them later. I picked up the seats from Kerroby Models (photo 13). They are not of the correct outline, and are probably 1:48 as well, but they can't really be seen inside the carriage so it matters little. I painted them green, the colour I remember NSWR seats to be from my childhood and the arm rests a suitable wood colour. After I had the seats I needed (I also purchased some toilets and hand basins from Kerroby but these are hidden away inside so I didn't bother installing them) I went about buying every seated whitemetal figure I could lay my hands upon. As you can see in the photo (photo 14) many of the figures needed their legs trimmed a bit to allow them to be seated. I did this while I was preparing them for painting. If there's any interest I'll write a few notes on painting figures at a later date. I glued the seats to the styrene bases with epoxy and then glued the figures to the seats. The seats may not be of the correct outline but there position is exactly as the plans describe, as is the positioning of the partitions. I test fitted the location of these interior seating panels before painting the carriages so I could make adjustments as needed. I don't like handling stock that has been painted any more than is necessary. Once I was satisfied with them I sprayed the roof sections with Floquil Weathered black and glued the seat panels in place with some super glue.

Painting and Lining

Painting and lining were carried out after all construction had been completed and I was satisfied with the detailing. I sprayed both carriages and other sub assemblies with a coat of grey car primer. The main coat of red was from a can of cheap spray paint called Tuscan I picked up from a $2 shop somewhere. I shudder to think what would have happened if I'd had a problem with the nozzle spitting but it all went fine and the colour was a pretty close match, well it is to my eye anyway. I masked this off and then sprayed the underbody with a coat of Weathered Black. The end verandahs and steps were hand painted, also in Weathered Black. I then oversprayed the body sides with a coat of Floquil Crystal Cote to provide a semi gloss finish for decals. I installed the buffer beam assemblies at about this stage and attached the painted bogies to the underframes.

I struggled with trying to print yellow decals on my Alps printer for these vehicles for ages and eventually gave up. For some reason I'm too technically illiterate to fathom, Alps printers have a real struggle with yellow. The depth of the colour just isn't strong enough and when applied over a deep tone such as a Tuscan red they simply disappear. So much for the high tech solution; on to plan B. From the depths of my modelling desk I drew forth an old set of decals intended for a set of HO Rub cars. The thickest of these lines was used to line the side of the FO and CCA (photo 16) and the numbers and letters from the same sheet were pressed into service on the sides. Wrong size and no red shadow but any port in a storm I always say. No one has ever sidled up to me and told me the decals are wrong. If doing the job now I'd have lined the side with my trusty bow pen because applying long decals is a nightmare. Once everything had dried and was in its correct location I gave the bodies a light overspray of Dullcoat©. After this I mixed up a suitable brown colour and applied a light dusting to the lower sides and bogies as weathering with

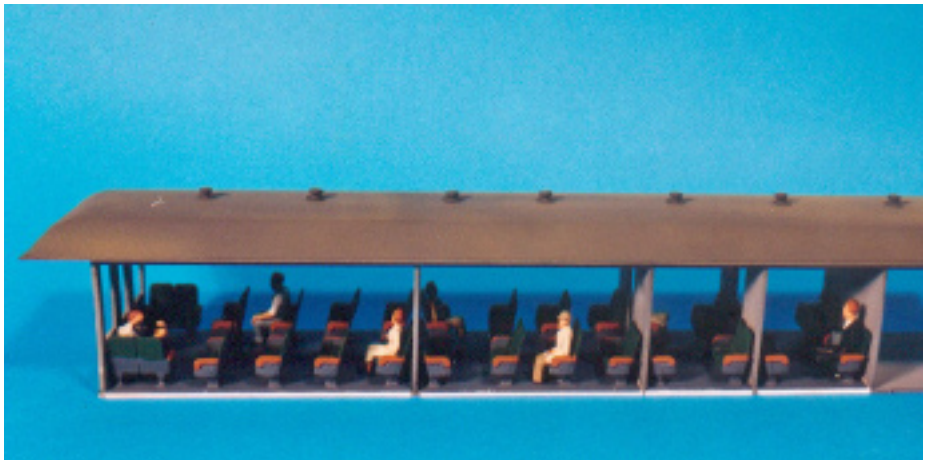


Photo 15

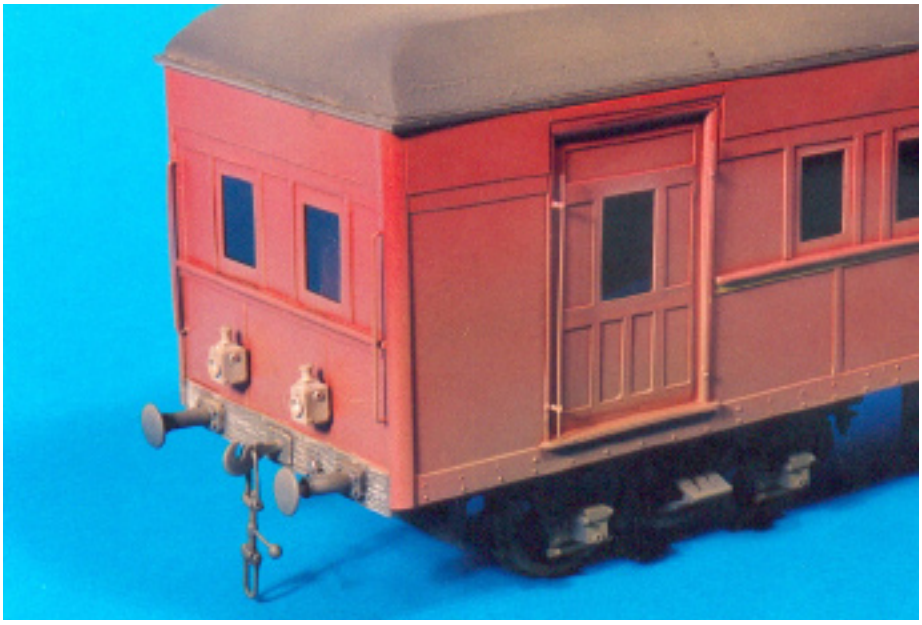


Photo 16

my air brush; just enough to highlight the details on the exterior and make the vehicles look like they had seen some service. After this final stage of painting was completed I set about cutting and fitting all the glazing. I used Testor's *Clear Parts Cement* for this job. This dries clear but you still need to be careful not to use too much as it will sqeeze out and be visible from outside.

Conclusion

I don't think I need to explain why I built these carriages beyond what I wrote in part 1 of this series; I model a line where these carriages were ubiquitous. To the question, "why scratch build" I would answer "why not"? I'm in this hobby to make things; in this case it happens to be carriage stock. They may not be perfect, and in reviewing the photos while writing these articles I can think of a dozen things I would have done differently, but they're mine, they're unique and they've been running on my layouts for the last six years. If I'd waited for a kit of these vehicles to emerge I'd still be waiting. I entered them both in the AMRA modelling competition and took out first and second prize with them so I reckon I'm doing ok. Why not give scratchbuilding a try and in the process give me a run for my money in the modelling competition, that way we'll probably both improve our modelling.

CCA/FO References

Article Name: Prototype - American Suburbans
AMRM Articles August 1999 issue, Page 35 Issue: 217 Volume: 19 Number: 4
Author/Contributor Name: David Cooke
Comment: Photographic synopsis of the NSWR truss sided cars BAB , BEB , BIB , BOB , BUB , CUD , LAB , LEB , LOB , LUB, VUB, BB & LBK .

Article Name: Project, Modelling - Building a CCA Branchline Carriage
AMRM Articles June 1984 issue, Page 50 Issue: 126 Volume: 11 Number: 9
Author/Contributor Name: Barry Wood
Comment: Camco FO Coach to CCA conversion

Article Name: Plan, Prototype - NSWR CCA Composite cars 226, 1273, 1277, 1446 & 1447
AMRM Articles December 1985 issue, Page 35 Issue: 135 Volume: 12 Number: 6
Author/Contributor Name: D. Estell, P. Rogers, H. Armstrong et al

Article Name: Madness in Miniature - Construction of an N Scale NSWR CCA Car (N)
AMRM Articles December 1985 issue, Page 38 Issue: 135 Volume: 12 Number: 6
Author/Contributor Name: Max Chaseling

Article Name:
AMRM Article July/Aug 1972 issue, Page 17
Comment: FO plan

Byways

Article Name: Photo, prototype (colour) - NSW - C30 3030 with one of the last trains on the Camden line heads 2 CCA cars up the grade to Kenny Hill, 30th Dec 1962
Byways 21/83
Author/Contributor Name: Tony Eyre

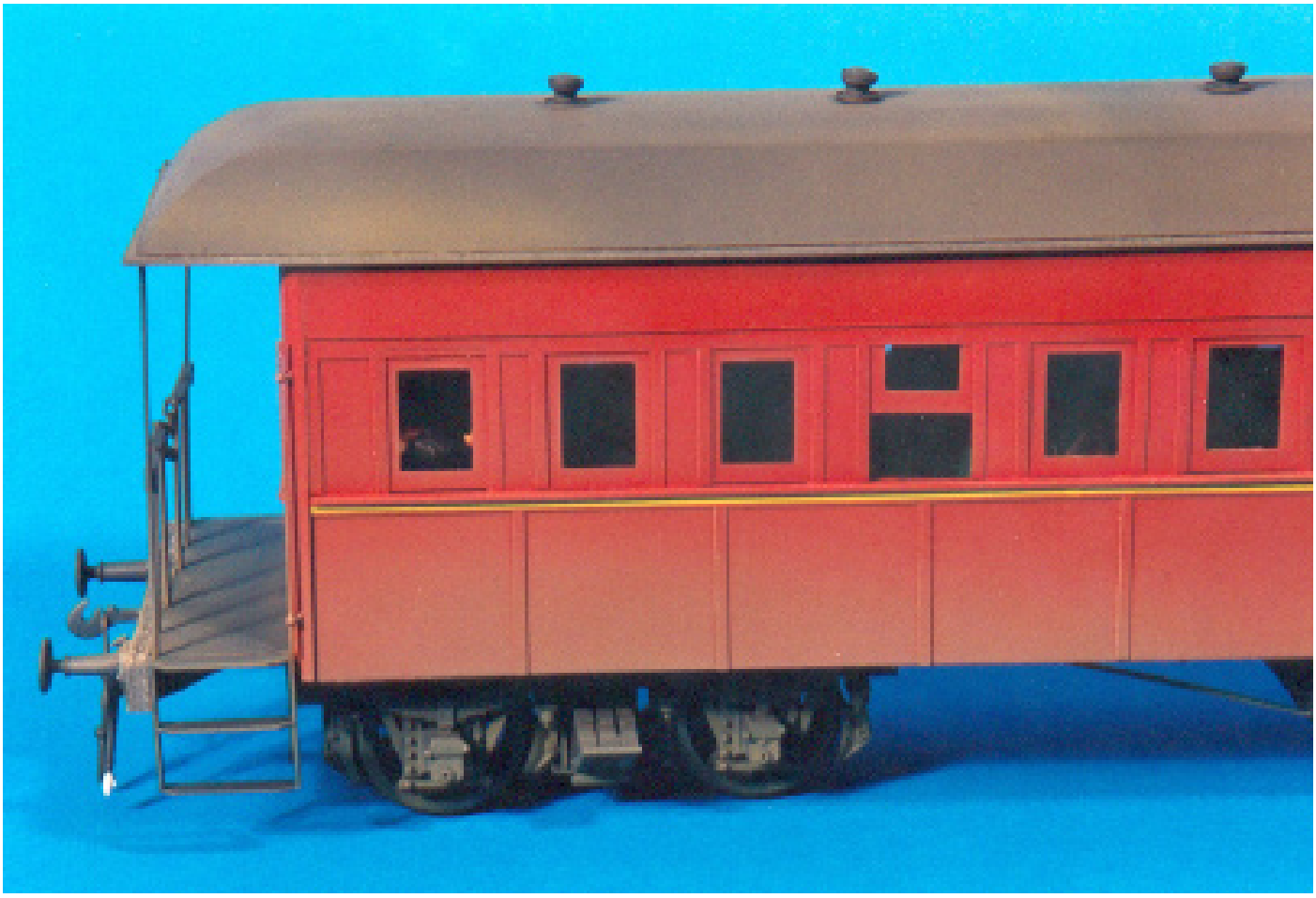
Article Name: Photo, prototype - NSW - Z13 1310 with a CCA carriage at Yass Town station, 1940
Byways 20/69
Author/Contributor Name: John Buckland
Comment: Shows station building and motor van

Article Name: Photo, prototype (Colour) - NSW - Z20 2001 at Morpeth station with an FA and CCA car - 13th Jun 1953
Byways 14/Rear Cover
Author/Contributor Name: Noel Reed
Comment: The platform and its canopy are quite separate from the station building which is at street level at a higher level. This is the third built station at Morpeth

Books

Locomotive Hauled Carriages of the NSW Railways Vol 2 Eveleigh Press

Carriages - A Century of NSW Locomotive Hauled Railway Carriages Tony Matthews



Review : Waratah Models 24 foot Girder Bridge

John R B Parker

Towards the end of the 19th century the New South Wales Government Railway Engineers developed some standard designs for metal railway bridges. One of the most commonly constructed was the 24' Steel Plate Web Girder Bridge. The Web Plate was solid and supported by vertical stiffeners which ran the full length of the girder. The first bridges were installed in about 1899 and, while there were some improvements incorporated in the design as the years went by, the basic design was still quite obvious in versions which were being constructed as late as the 1960's and 70's.

Waratah Models latest infrastructure kit is supplied in a cardboard mailing package. This ensures that the three major components, etched brass sheet, timber and nut/bolt/washer mouldings arrive on your work bench in excellent condition. The comprehensive assembly instructions include a colour photograph of the completed model but unfortunately the quality of the photograph lessens it usefulness.

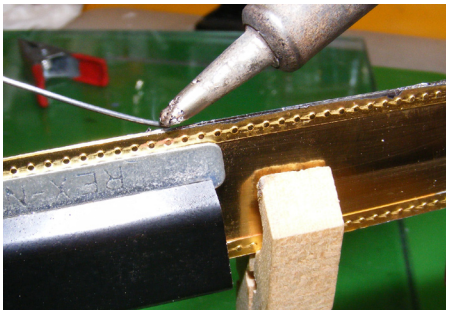
If you can, resist the urge to immediately commence construction and carefully read through the 6 pages of instructions complete with diagrams. All parts are numbered on the brass etch and even though the diagrams do not include the part numbers it is a simple matter to work out 'what goes where.' The instructions suggest assembly by soldering or the use of adhesives. Although soldering is the natural choice I decided to build one side of the bridge using superglue to test the suitability of this method of assembly.

The accompany photographs highlight the one substantial variation I made to the assembly sequence suggested in the instructions. I started at 'Step 2' as I felt it would be easier to add the flanges (part 2) at the end of the assembly process rather than the beginning. Most of the construction can now be carried out on a flat surface. This certainly worked out well but the choice is yours.

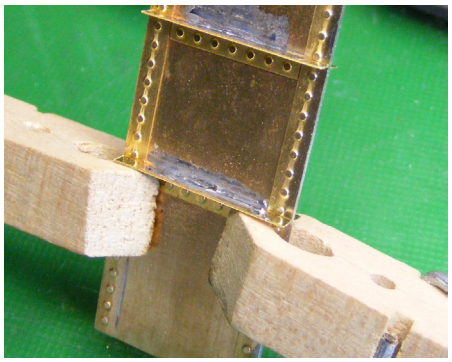
All components were removed from the etched brass sheet with a hobby knife. Simply place the 'etch' on a scrap piece of MDF or Craftwood and place the point of the blade as close as possible to the 'tab'. Push the knife downwards in a shearing action to cut through the 'tab'. This method reduces the amount of clean up required, usually a couple of passes across a fine abrasive paper on a flat surface is sufficient.

Only one component in this kit requires folding, the 'web support angles' (part 4) but there are a total of 36 to fold through 90 degrees. This component does not have an etched fold line but its preparation is not difficult. I used the handy 'Hold and Fold' tool but a smooth jawed vice could also be used.

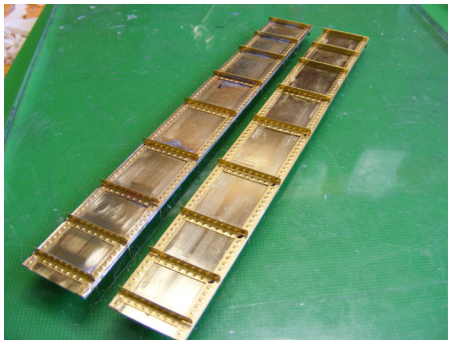
If you are not completely confident with your soldering skills or have never attempted a brass model you will find that this kit is a very good place to start. It is not a 'quick kit'. I spent an enjoyable 12 hours spread over a few evenings, but it builds up into a fine model and the end result is a very useful piece on infrastructure that is strong enough to be re-cycled through a number of dioramas and layouts. Who knows, maybe someone in the future will comment, "That's the bridge that grandpa made!"



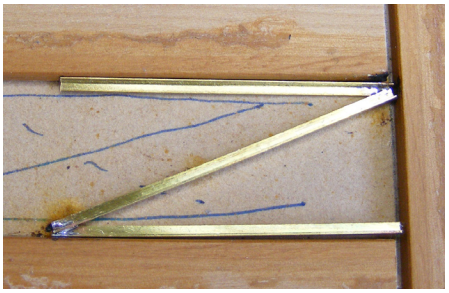
1. Using Bulldog clips, clamp the two flange support rivet strips, one on each side of the plate girder. Apply flux (I used the flux available from P.M.E.) and solder along the edge. Capillary action will cause the solder to flow into the joint with minimal, if any clean up required. If you decide to use adhesive instead apply "superglue" in a similar manner again allowing the capillary action to do the work.



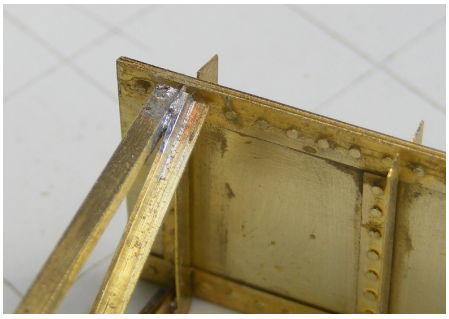
2. Using 'clothes peg clamps' to eliminate the heat sinking effects of metal clamps, hold the formed web support angles in place on one side. Solder along the join away from the rivets and then repeat on the other side. I found most success by first applying flux to the intersection between the two parts. Place a very small piece of resin cored along the joint before soldering with a 'wetted' soldering iron. The aim is to obtain a neat joint with the minimum amount of excess solder.



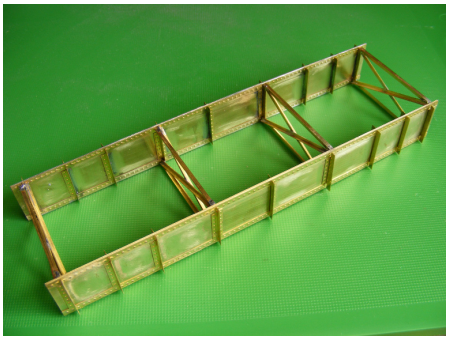
3. In the above photograph the side completed by soldering is on the left; the side on the right was assembled using 'superglue'. Note that the top and bottom flanges of the girder have not yet been fitted. Clean up using glass fibre brushes.



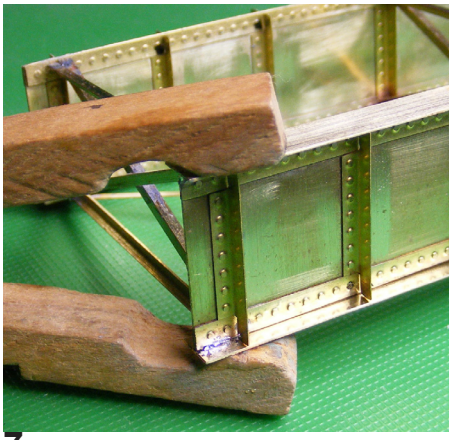
4. Following the instructions (I used glue rather than nails) a simple jig was constructed to ensure accurate assembly of the transverse support frames. Solder up the 'Z' shape piece first and then solder the cross piece **only** in the centre. Do **not** solder this piece to the ends at this stage.



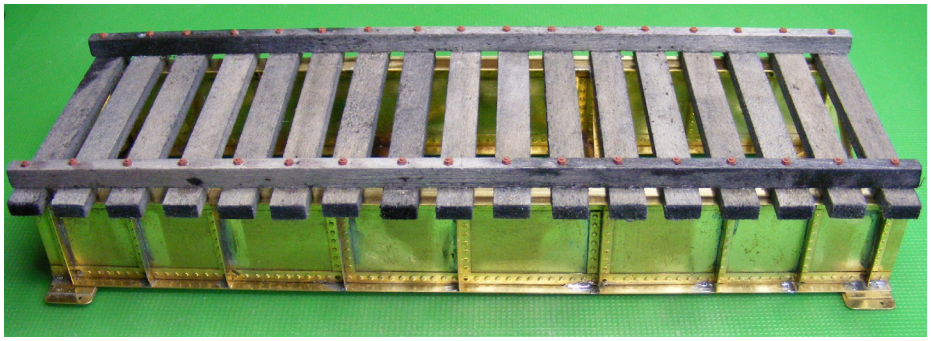
5. Using clamps the transverse support frame can now be assembled, first to one side and then the other. Note that the 'Z shape transverse support frame goes on one side of the folded web whilst the other cross piece is soldered to the other side. (This was the point left unsoldered at step 4.)



6. The almost completed bridge before the addition of the top and bottom flanges of the girders. After painting it will impossible to see any difference between the 'soldered' and 'glued' sides.



7. Using modified clothes pegs or similar, clamp the top and bottom flanges of the girder and then solder (or glue) into place.



8. The timber was stained to achieve a weathered look before assembly. The bridge is now ready for painting and the final weathering. I would not normally add the rails until the bridge is located in its final place on the layout.

Hurstville Exhibition Report

Martin Hartley

My first Hurstville report back in 2004 was from the perspective of an attendee. It's hard to believe that in less than 12 months from then I became an exhibitor and 3 years later I am writing another report.

In attendance were Stringybark Creek (2-rail finescale), representing the modern O scale and Trainsville (3-rail AMRA O gauge), representing the earlier roots of the Australian O scale scene. Commercial support came in the form of the Waratah Model Railway Co. and O-Aust and a new company called "Mountain Blue" which specializes in figures. Aus7 also had a stand where we spoke to the general public about our group and from where we also sold magazines. I'm told by our treasurer, Roger Porter, that a few new members signed up and a healthy number of magazines were sold.

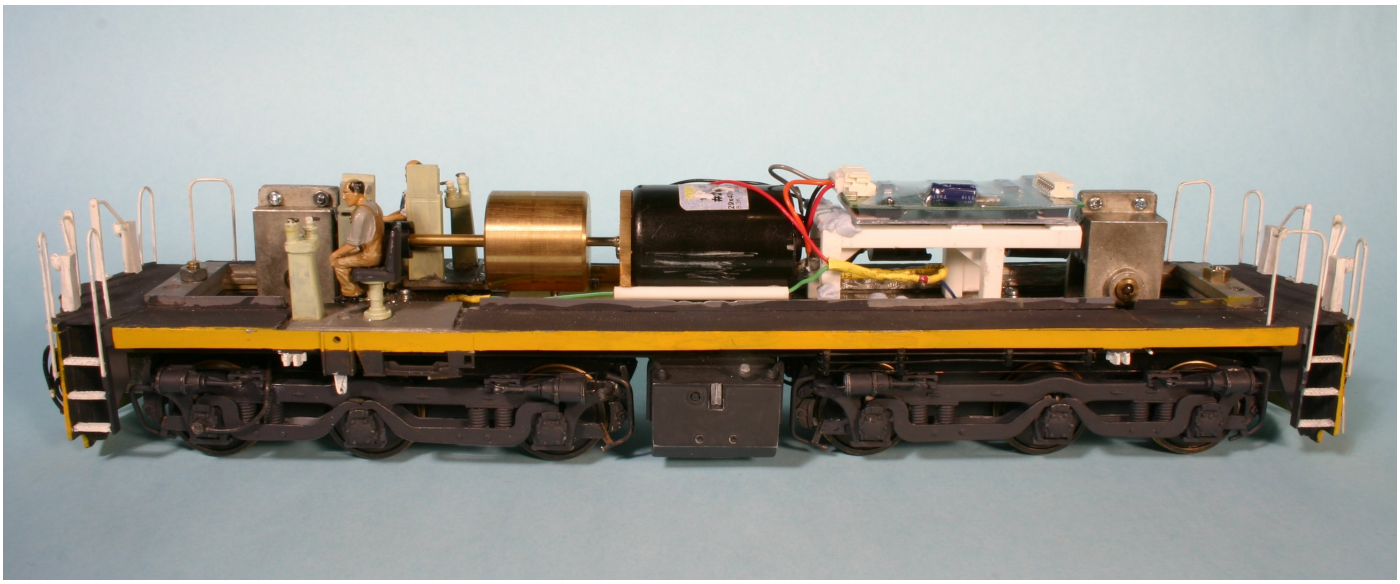
The exhibition manager informed us that attendance was up by some 30% from the previous year (who said that model railways was a dying hobby?). Stringybark Creek took out the Norm Read Trophy for the third year running. There was enormous interest in the models and how everything was made. I would like to see even just half the inquiries turn into membership applications! The commercial stands reported mixed success with sales. It highlighted the limited market for O scale and how it can be difficult to provide commercial support. There are a string of new kits due to be released during 2008, so keep a good look out in this magazine for them!

Lastly, I would also like to report that there is an interest in model railways growing in new generation of modellers (who said that model railways was an old man's hobby?).

Scenes from Stringbark Creek - Winnerof the Norm Read Trophy for the thirr year running

Mick Moore's 48155

Model by Mick Moore - Photos Trevor Hodges



Aus 7 News (cont)

Have A Heart?

In early September our Secretary Trevor Hodges found himself in RPA with a bad case of what he thought at first was indigestion. It turned out to be a blocked artery and within a couple of days he was undergoing bypass surgery. Trevor is recovering well however he claims that being referred to as a "personality" in AMRM recently almost gave him a relapse. He seems to be getting back to normal as this issue of 7th Heaven will attest.

Commercial News

Trevor Hodges

CIL Distributors

CIL Distributors, who can be contacted at PO Box 236 Castle hill, NSW 1765 or at kbognar@bigpond.com.au have announced the release of a 60' NSWR turntable in O-scale. This turntable features self indexing with auto power cutoff. The well is formed from metal with a reinforced polyurethane bridge providing excellent detail. The turntable was on display at the recent BDO and operated smoothly and quietly. It comes supplied with code 124 NS rail.

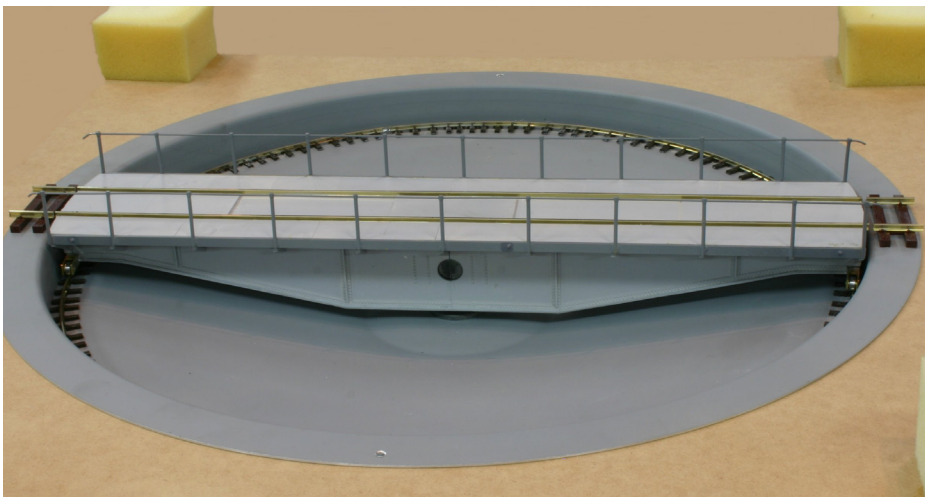
The following is from a detail sheet distributed by the company.

The turntable features one track in and one track out. Polarity to track reverses automatically on a 180º turn. The bridge runs on a perimeter track aided by four sealed ball bearings in two brass carriers.

A long toothed urethane belt drives the bridge at a slow prototypical speed. Interlocked indexing is released by pressing a button on a control box.

Requires 14-17 volt AC power supply to operate. A cutout of 425mm required with under baseboard clearance of 115mm for the motor gearbox.

The turntable retails for $725.



CIL Distributers 60' NSWR Turntables

Keiran Ryan Models

Keiran Ryan, Keiran Ryan Models, 39 Coachwood Cres, Picton, NSW, 2571, (02) 46772462, krmodels@gmail.com & www.7mmkitsnbits.com have announced that the new signal kits should be ready by Christmas. These kits will be available in either McKenzie & Holland or Standard type, with timber arms for the M & H signals. The posts will come in 3 sizes, 20ft, 24ft and 26ft. and will be in timber laser kit form using 0.6mm timber. These will also include timber for the landing.

Bracket Signals will be available sometime during 2008. If demand is high enough some of the more obscure signal arms will be produced, (shunters signal arms, close up signals etc) but for now the concentration is on the main signal arms and posts. Along with these developments Keiran is working on catch point indicators and lever frames available in a range of configurations, in kit form, also for a 2008 release.

A point slack adjuster is also being developed (the mechanism that attaches to the point blade).

O-Aust and Century Models

O-Aust / Century Models 32 Class - Patterns

O-Aust Kits/Century Models can be contacted at pa_rl_krause@bigpond.com, and via the web site at www.oaustkits.com.au, at PO Box 743, Albany Creek, Qld, 4035, mob 0419680584 anytime or on (07) 3298 6283 between 7 and 9 pm.

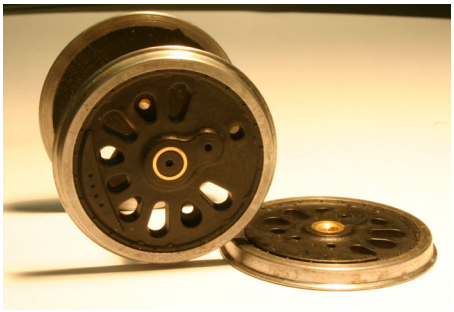
Pattern work for the C32 loco kit is expected to be completed by Christmas 2007 and it is hoped to have a working display sample ready at the same time. As soon as the sample is available a photo of it and an order form will be placed on the O-Aust Kits website and a posting to that effect placed on the Aus7 group chat line. Orders will be taken after the posting is in place and the first production batch should be available about 3 months later (provided Murphy keeps out of the way). Those who prefer can order through Bergs. Contrary to earlier advice it is now understood that

there is still some outstanding pattern work to be completed on the C30T locomotive but the tender kits are currently being manufactured and will be distributed when completed. This is news passed along from Graham Holland. More BWHs and ACMs are currently being cast and should be available shortly. All future S wagon kits will be supplied with the one piece body casting.

The urethane castings for the first batch of the SRC kit are now on hand. The kit will be supplied with etched brass details similar to the KR Models MRC detail kit as standard and the kit will be available for purchase as soon as the etchings are completed. The Shell 3000 tank car and the LLV should now be available early 2008 and the MHG in time for Hurstville 2008. Patternwork for a CR coach is underway.

Prototype Model Engineering

At the recent BDO Prototype Model Engineering (PME), PO Box 644 St Ives, NSW 2075, Ron Sebbens



PME BoxPok Wheels

on (02) 9449 6605 announced they were considering the production of a kit for the NSWGR Class 14 T(14) 2-2-2 Express Passenger locomotive (pictured) in 7mm Finescale and S7. These locomotives (3 in class) were placed in service in 1865-66 and were intended for use in high speed passenger workings. Built by Beyer Peacock & Co they worked the "The Fish" to Penrith and were then sent to Dubbo and Junee. The class was superseded by the D-class in 1892 and all three locomotives were scrapped the following year. On display was the prototype of the proposed kit. Those wishing to register their interest in the locomotive kit should contact PME.

Waratah Models 24' Bridge

Also on display at the BDO were samples of the Boxpok wheels to be used on the upcoming (C)38 class project. The wheels are being produced by Slaters of the UK and are the correct design for the NSWGR (C)38.

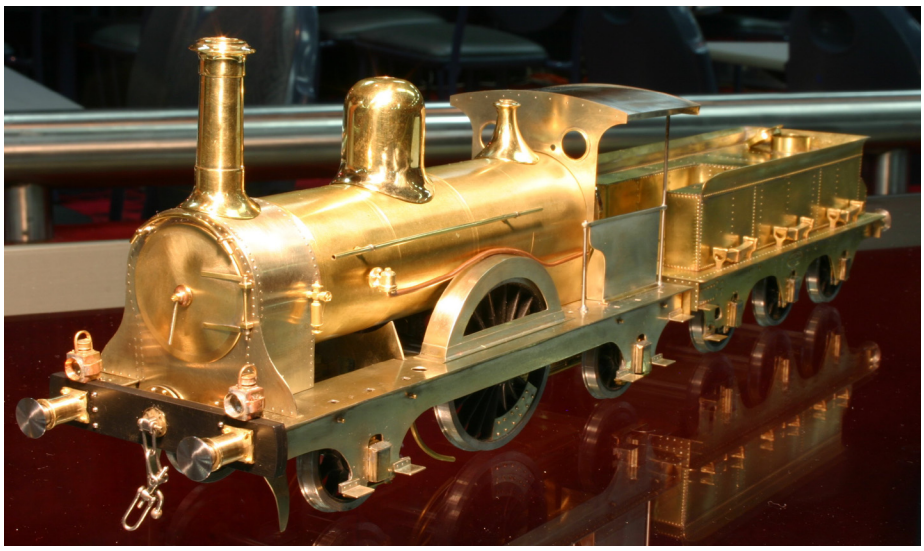
Ron Sebbens announced that the (Z)12 project was on track for a 2008 release.

Waratah Models

Waratah Model Railway Company, PO Box 509, Revesby, NSW, 2212 (02) 97851166 charris@nigelbowen.com.au and davemorris59@yahoo.com have released an etched brass/timber kit for the 24' girder bridge (pictured) which was the standard NSWGR small bridge design for many decades from the end of the 19th century. It is a perfect kit for a person who has no previous soldering experience and would like to learn, although it can also be glued together. The kit includes all brass components for the girders, including bed and bearing plates, and all timber and NBWs for the bridge deck. Rail and abutments are not included. Because multiple spans were often installed, the kit is available as a one, two or three span kit for $90, $165 or $240.

Pattern work for the ICV kit is now complete and as soon as all components are on hand (no more than two weeks at the time of writing) a pilot model will be produced as will the instructions. This is from the "horse's mouth" so to speak as this writer is the pattern maker and instruction writer.

Waratah have indicated there will have to be some modest price rises in their product line in 2008 so they're suggesting that potential customers get in now to snap up a bargain.



PME's T14 Class

O-Aust Kits

www.oaustkits.com.au

Suppliers of:

- O Gauge Australian rollingstock as kits and ready to run*
- *Century Models* 7mm scale NSWGR steam locomotives
- A large range of O-Gauge parts and accessories

LATEST RELEASE

NSWGR S Wagon
with one piece body casting

KIT AVAILABLE

NSWGR BCH coal hopper

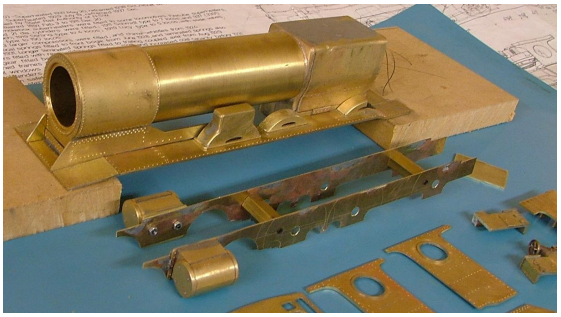
KIT AVAILABLE

NSWGR BWH Wheat Hopper

KIT AVAILABLE

NSWGR ACM Branchline Sleeper

WORK IN PROGRESS



Pattern work for C32 steam locomotive

Kits available

O-Aust Kits	*Century Models*
48 class DEL, ACM, S wagon, MRC, UME, BCW, CW, BHG, BCH BWH, QLX (QR)	Z19 class D50 class

Planned for future release:

O-Aust Kits	*Century Models*
C32 steam loco 830class DEL, Shell 3000 & 5000 tank, SRC, LLV, MLV, MHG, CR, BBV (QR), K/KA (QR) DH loco (QR)	C30T

PO Box 743, Albany Creek, Qld, 4035 or email pa_rl_krause@bigpond.com.au
Phone 07 3298 6283 Fax 07 3298 6287
Mobile 0419 680 584
www.oaustkits.com.au

(*Note: Ready to run rollingstock is available to order only)